

WHAT IS CLAIMED IS:

- 1        1. A method for determining a type of an option spread based upon options
- 2        received from an input device comprising, the steps of:
  - 3            (a) determining a first previous option count;
  - 4            (b) receiving a first option from an input device comprising an optioncode, a
  - 5        contract, a strike, and a callput;
  - 6            (c) assigning a quantity for the first option;
  - 7            (d) determining a second previous option count;
  - 8            (e) receiving a second option from an input device comprising an optioncode,
  - 9        a contract, a strike, and a callput;
  - 10          (f) comparing the second option to the first option;
  - 11          (g) assigning a quantity for at least one of the first option and the second
  - 12        option based upon the comparison of the second option to the first option; and,
  - 13          (h) determining a type of option spread based upon at least one of the first and
  - 14        second option counts, the comparison of the second option to the first option, and the
  - 15        assigned quantities of the first and second options.

- 1        2. A method as in claim 1, further comprising, the step of:
  - 2            (i) calculating a price for the option spread.

- 1        3. A method as in claim 2, further comprising, the step of:
  - 2            (j) naming the option spread.

1           4. A method as in claim 3, further comprising, the step of:

2                 (k) calculating at least one of a delta, gamma, vega, theta, and an implied

3                 volatility of at least one of the first option, the second option, and the option spread;

4                 wherein the delta indicates price sensitivity to changes in price of an

5                 underlying asset for the option;

6                 wherein the gamma indicates delta sensitivity to changes in price of the

7                 underlying asset for the option;

8                 wherein the vega indicates price sensitivity to changes in expected volatility;

9                 wherein the theta indicates price sensitivity to changes in time until expiration

10                 of the option; and,

11                 wherein the implied volatility indicates a particular volatility derived from

12                 market price.

1           5. A method as in claim 4, wherein the delta, gamma, vega, theta, and implied

2                 volatility is calculated as at least one of an aggregate value and a subtotal by underlying

3                 asset.

1           6. A method as in claim 4, further comprising, the step of:

2                 (l) sending at least one of the quantity, price, name, delta, gamma, vega,

3                 theta, and implied volatility to a display device.

1           7. A method as in claim 1, further comprising, the step of:

2                    sending the optioncode, contract, strike, and callput of the first option to a  
3    display device.

1                8. A method as in claim 7 further comprising, the step of:  
2                    (m) displaying at least one of the quantity, name, price, delta, gamma, vega,  
3    theta, and implied volatility on the display device.

1                9. A method as in claim 7 further comprising, the step of:  
2                    displaying the optioncode, contract, strike, and callput of the first option on  
3    the display device.

1                10. A method as in claim 1 wherein the input device is at least one of a mouse, a  
2    keyboard, a light emitting diode device, a pointing pen, a stylus, a touch screen, and a  
3    tracking ball.

1                11. A method as in claim 1 wherein the option spread is at least one of a  
2    straddle, a ratio vertical put spread, a vertical put spread, a calendar put spread, a calendar  
3    vertical put spread, a ratio calendar put spread, a ratio vertical calendar put spread, a  
4    calendar fence/collar, a calendar ratio fence/collar, a calendar strangle, a fence/collar, a  
5    ratio fence/collar, a strangle, a conversion, a synthetic long futures, a synthetic short  
6    futures, a ratio vertical call spread, a vertical call spread, a calendar call spread, a

7      calendar vertical call spread, a ratio calendar call spread, and a ratio vertical calendar put  
8      spread.

1            12. A method for determining a type of option spread based upon a sequence of  
2      options received from an input device comprising, the steps of:

3                (a) determining a previous option count;  
4                (b) receiving a sequence of options from an input device, each option  
5      comprising an optioncode, a contract, a strike, and a callput;

6                (c) comparing the optioncode, contract, strike, and callput of each option with  
7      the optioncode, contract, strike, and callput of each other option in the sequence;

8                (d) assigning a quantity for at least one option in the sequence of options  
9      based upon the comparison of each option with respect to each other option and the  
10     quantity of each option with respect to each other option; and

11               (e) determining a type of option spread based upon the previous option count,  
12     comparison of each option with each other option, and the assigned quantity of each  
13     option.

1            13. A method as in claim 12 further comprising, the step of:

2               (f) calculating a price of the option spread.

1            14. A method as in claim 13 further comprising, the step of:

2               (g) naming the option spread.

1           15. A method as in claim 14 further comprising, the step of:

2                 (h) calculating at least one of a delta, gamma, vega, theta, and an implied

3                 volatility of at least one of said option in the sequence of options and in the option

4                 spread;

5                 wherein the delta indicates price sensitivity to changes in price of the

6                 underlying asset for the option;

7                 wherein the gamma indicates delta sensitivity to changes in price of an

8                 underlying asset for the option;

9                 wherein the vega indicates price sensitivity to changes in expected volatility;

10                wherein the theta indicates price sensitivity to changes in time until expiration

11                of the option; and,

12                wherein the implied volatility indicates a particular volatility derived from

13                market price.

1           16. A method as in claim 15 further comprising, the step of:

2                 (i) sending at least one of the quantity, price, name, delta, gamma, vega, theta,

3                 and implied volatility to a display device.

1           17. A method as in claim 16, further comprising, the step of:

2                 (i) displaying at least one of the quantity, price, name, delta, gamma, vega,

3                 theta, and implied volatility on the display device.

1           18. A method as in claim 12 wherein the input device is at least one of a mouse,  
2        keyboard, a light emitting diode device, a pointing pen, a stylus, a touch screen, and a  
3        tracking ball.

1           19. A method as in claim 12 wherein the option spread is at least one of a  
2        straddle, a ratio vertical put spread, a vertical put spread, a calendar put spread, a calendar  
3        vertical put spread, a ratio calendar put spread, a ratio vertical calendar put spread, a  
4        calendar fence/collar, a calendar ratio fence/collar, a calendar strangle, a fence/collar, a  
5        ratio fence/collar, a strangle, a conversion, a synthetic long futures, a synthetic short  
6        futures, a ratio vertical call spread, a vertical call spread, a calendar call spread, a  
7        calendar vertical call spread, a ratio calendar call spread, a ratio vertical calendar put  
8        spread, 3-way call spread versus a put, 3-way put spread versus a call, call tree, put tree,  
9        butterfly, iron butterfly, and straddle spread.

1           20. A method for determining a type of option spread based upon a sequence of  
2        user selections received from an input device comprising, the steps of:  
3                  displaying a set of grids on a display device, each grid representing an  
4        optioncode and comprising a set of selectable options;  
5                  receiving a sequence of user selections chosen from the set of selectable  
6        options, each user selection comprising an optioncode, a contract, a strike, and a callput;  
7                  comparing the optioncode, contract, strike, and callput of each user selection  
8        with each other user selection in the sequence;

9               assigning a quantity for at least one user selection in the sequence of user  
10      selections based upon the comparison of each user selection with each other user  
11      selection and the assigned quantity of each user selection; and  
12               determining a type of option spread based upon a previous option count, the  
13      comparison of each user selection with each other user selection, and the assigned  
14      quantity of each user selection.

1               21. A method as in claim 20, wherein each grid comprises an x-axis and a y-axis,  
2      the x-axis comprises a set of contract and callput selections while the y-axis comprises a  
3      set of strike selections or vice versa.

1               22. A method as in claim 20, wherein the comparing step occurs prior to at least  
2      one of a predefined time out and a receipt of a clear instruction.

1               23. A method for determining a type of option spread based upon a sequence of  
2      user selections received from an input device, comprising the steps of:  
3               viewing a set of grids on a display device, each grid representing a single  
4      optioncode and comprising a set of selectable boxes;  
5               selecting a sequence of boxes, each selection in the sequence comprising on  
6      optioncode, a contract, a strike, and a callput; and  
7               receiving for the selected sequence an option spread name, an option spread  
8      price, and at least one of a positive and negative quantity for the option spread.

1           24. A method as in claim 23, further comprising, the step of:  
2                 receiving a quantity, inclusive of at least one of a positive and negative sign,  
3         for each user selection in the sequence.

1           25. A method as in claim 24, further comprising, the step of:  
2                 receiving at least one of a calculated delta, gamma, vega, theta, and implied  
3         volatility of at least one of said selection in the sequence and the option spread;  
4                 wherein the delta indicates price sensitivity to changes in price of an  
5         underlying asset for the option;  
6                 wherein the gamma indicates delta sensitivity to changes in price of an  
7         underlying asset for the option;  
8                 wherein the vega indicates price sensitivity to changes in expected volatility;  
9                 wherein the theta indicates price sensitivity to changes in time until expiration  
10         of the option; and,  
11                 wherein the implied volatility indicates a particular volatility derived from  
12         market price.

1           26. A method as in claim 23, wherein each grid comprises an x-axis and a y-axis,  
2         the x-axis comprises a set of contract and the callput selections while the y-axis  
3         comprises a set of strike selections or vice versa.

1           27. A method as in claim 23, further comprising, the step of:

2 saving the received option spread to a watch list for an update on the price of  
3 the option spread.

1 28. A method as in claim 23, further comprising, the step of:  
2 instructing a sign change of the received option spread that reverses the sign  
3 of the received quantity for at least one user selection in the sequence; and,  
4 receiving a renamed option spread name and a recalculated option spread  
5 price based upon the sign change instruction.

1 29. A method as in claim 25, further comprising, the step of:  
2 instructing a sign change of the received option spread that reverses the sign  
3 of the received quantity for at least one user selection in the sequence; and,  
4 receiving a recalculated at least one of a delta, gamma, vega, theta, and  
5 implied volatility.

1 30. A method as in claim 25, further comprising, the step of:  
2 instructing a sign change of a second selection in the sequence that reverses  
3 the sign of the received quantity for each user selection in the sequence; and,  
4 receiving a recalculated at least one of a delta, gamma, vega, theta, and  
5 implied volatility.

1           31. A method as in claim 23, further comprising, the step of:  
2                 adding a hedge with a user specified price; and  
3                 receiving a recalculated option spread price in accordance with the added  
4                 hedge.

1           32. A method as in claim 23, further comprising, the step of:  
2                 adding a hedge with a market specified price; and  
3                 receiving a recalculated option spread price in accordance with the added  
4                 hedge.

1           33. A computer system for determining a type of option spread, the computer  
2        system comprising:  
3                 a memory; and  
4                 a processor interconnected with the memory and having at least one software  
5        component loaded therein,  
6                 wherein the software component causes the processor to execute the steps of  
7        method according to claim 20.

8           34. A computer program product comprising a computer readable medium  
9        having a software component encoded thereon in computer readable form, wherein the  
10      software component may be loaded into the memory of a computer system and cause a

11 processor interconnected with the memory to execute the steps of a method according to  
12 claim 20.